

IN THE CLAIMS:

Please cancel Claims 19, 31-34, 38, and 40, without prejudice to or disclaimer of the subject matter recited therein. Please amend Claims 1, 4, 5, 7, 10, 11, 14, 15, 17, 20, 21, 24, 25, 35-37, 39, and 41-43, and add new Claims 44-46, as follows.

1. (Currently Amended) A printing apparatus to which an expendable unit, having a memory, ~~for storing and holding information that concerns a~~ including a plurality of memory areas, and a recording agent, and a use state of the recording agent used in a print process, is detachably attached, wherein said a plurality of memory areas include a first memory area storing data concerning a use state of the expendable unit, a second memory area storing data concerning a use state of the recording agent and a third memory area storing data for setting inhibition/permission of writing with respect to the first and second memory areas, said apparatus comprising:

memory access means for reading from and writing to the memory in the expendable unit; and

setting means for setting inhibition/permission inhibition of writing with respect to the first and the second memory areas in the memory in the expendable unit by writing predetermined data into the third memory area the data which is stored in the memory which has a data area storing the data that concerns the recording agent and the use state of the recording agent and a setting area setting inhibition/permission of writing with respect to the data area;

wherein said setting means sets, into the setting area, data for inhibiting or permitting of writing with respect to the data area inhibition of writing of the first and the second memory areas, at different timings, on the basis of the use state of the expendable unit and the use state of the recording agent.

2. (Original) The apparatus according to claim 1, wherein said memory access means and the memory are connected via a serial communication line.

3. (Original) The apparatus according to claim 1, wherein said memory access means and the memory are connected via non-contact communication means.

4. (Currently Amended) The apparatus according to claim 1, further comprising: detection means for detecting an amount of an expendable the recording agent in the expendable unit; and

update means for writing the expendable recording agent amount detected by said detection means in the data second memory area of the memory via said memory access means, and

wherein said setting means sets to inhibit writing to the data second memory area when said detection means detects that the remaining amount of the expendable agent becomes less than a predetermined amount.

5. (Currently Amended) The apparatus according to claim 4, wherein one or a plurality of predetermined amounts of the ~~expendable~~ recording agent are determined in advance, when each of the predetermined amounts has been reached, data indicating that the predetermined amount has been reached is written in the ~~data~~ second memory area corresponding to that predetermined amount at a different timing, and writing to the ~~data~~ second memory area is set to be inhibited.

6. (Cancel)

7. (Currently Amended) A printing apparatus comprising:
detaching/attaching means for detaching or attaching an expendable unit having a recording agent and a memory capable of setting a locking state for inhibiting data writing with respect to ~~at least a predetermined area~~ a plurality of memory areas in the memory, said a plurality of memory areas including a first memory area storing data concerning a use state of the expendable unit, a second memory area storing data concerning a use state of the recording agent and a setting area storing data for setting inhibition/permission of writing with respect to the first and second memory areas;

detection means for detecting a state of the expendable unit and a state of the recording agent;

write means for writing a result detected by said detection means to the memory which has a setting area setting inhibition/permission of writing with respect to the predetermined area; and

locking state control means for controlling the locking state of the ~~memory~~ by setting data into the setting area, first memory area on the basis of the status of said expendable unit detected by detection means and controlling the locking state of the second memory area on the basis of the use status of the recording agent detected by said detection means.

8. (Previously Presented) The apparatus according to claim 7, wherein the data communication between said printer and said expendable unit is made by wireless transmission.

9. (Previously Presented) The apparatus according to claim 7, wherein said detection means detects an amount of an expendable agent in the expendable unit.

10. (Currently Amended) The apparatus according to claim 7, wherein, when the amount of the ~~expendable~~ recording agent in the expendable unit detected by said detection means reaches a predetermined amount or one of a plurality of predetermined amounts, said write means writes data, indicating that the amount of ~~expendable~~ recording agent has reached the predetermined amounts, in said predetermined second memory area of said memory, and said lock state control means sets data into said setting area so that the predetermined second memory area of the memory becomes locked.

11. (Currently Amended) A method of controlling a printing apparatus to which an expendable unit, having a memory, ~~for storing and holding information that concerns including a plurality of memory areas, and a recording agent, and a use state of the recording agent used in a print process~~, is detachably attached, said plurality of memory areas including a first memory area storing data concerning a use state of the expendable unit, a second memory area storing data concerning a use state of the recording agent and a third memory area storing data for setting inhibition/permission of writing with respect to the first and the second memory areas, said method comprising:

the memory access step of reading from and writing to the memory in the expendable unit; and

the setting step of setting ~~inhibition/permission~~ inhibition of writing with respect to a data area in the memory by setting, into a setting area in the memory, data for setting inhibition/permission of writing with respect to the data area the first and the second memory areas, at different timings by writing predetermined data into the third memory area on the basis of the use state of the expendable unit and the use state of the recording agent.

12. (Original) The method according to claim 11, wherein data communication with said memory in said memory access step is performed by using a serial communication line.

13. (Original) The method according to claim 11, wherein data communication with said memory in said memory access step is performed in non-contact manner with said memory.

14. (Currently Amended) The method according to claim 11, further comprising the detection step of detecting an amount of expendable recording agent in said expendable unit,

wherein, in said memory access step, the amount of the expendable recording agent in said expendable unit is written to the data second memory area of said memory, and in said setting step, when the amount of the expendable recording agent detected in said detection step is less than a predetermined amount, writing to the data second memory area of said memory is set to be inhibited by setting the predetermined data into the setting third memory area.

15. (Currently Amended) The method according to claim 14, wherein one or a plurality of predetermined amounts of the expendable recording agent are determined in advance, when each of the predetermined amounts has been reached, data indicating that the predetermined amount has been reached is written in the data second memory area corresponding to that predetermined amount at a different timing, and writing to the data second memory area is set to be inhibited.

16. (Cancel)

17. (Currently Amended) A method of controlling a printing apparatus having detaching/attaching means for detaching or attaching an expendable unit having a recording agent and a memory, capable of setting a locking state for inhibiting data writing with respect to a predetermined area plurality of memory areas in the memory, said a plurality of memory areas including a first memory area storing data concerning a initial use state of the expendable unit, a second memory area storing data concerning a use state of the recording agent and a setting area storing data for setting inhibition/permission of writing with respect to the first and the second memory areas, comprising the steps of:

the detection step of detecting a use state of the expendable unit and a use state of the recording agent;

the write step of writing the result detected in said detection step to the memory; and

the locking state control step of controlling a locking state of the first memory area memory by setting, into a setting area of the memory, data for setting the locking state of the predetermined area of the memory, on the basis of the initial use status of the expendable unit detected in said detection step and controlling a locking state of the second memory area on the basis of the use state of the recording agent detected in said detection step.

18. (Original) The method according to claim 17, wherein data communication between the printing apparatus and the memory is made by wireless.

19. (Canceled)

20. (Currently Amended) The method according to claim 17, wherein, when the amount of the ~~expendable~~ recording agent in the expendable unit detected in said detection step reaches a predetermined amount or one of a plurality of predetermined amounts, data indicating that the amount of ~~expendable~~ the recording agent has reached the predetermined amount is written in the predetermined second memory area of said memory in said write step, and, in said lock state control step, said memory is controlled so that the predetermined second memory area of the memory becomes locked.

21. (Currently Amended) An expendable unit which has ~~an expendable a~~ recording agent used in a print process and is detachable from a printing apparatus, comprising:

communication means for communicating with the printing apparatus in a condition that said expendable unit is attached to the printing apparatus; a memory for storing and holding information that concerns ~~to~~ the expendable unit and the recording agent, and writing and reading out data via said communication means when said expendable unit is attached to the printing apparatus,

wherein said memory ~~having a data has a first memory~~ area storing data that concerns the recording unit concerning an initial use state of said expendable unit, a second memory area storing data concerning the recording agent in said expendable unit, and a

setting area setting inhibition/permission of writing with respect to the ~~data area~~ first memory area and the second memory area, and
~~means for receiving information indicating permission/inhibition of writing to said memory in units of addresses via said communication means, and locking writing to said memory.~~

22. (Previously Presented) The expendable unit according to claim 21, wherein said communication means is means for communicating with the printer via a serial communication line.

23. (Previously Presented) The expandable unit according to claim 21, wherein said communication means is means for communicating with the printer by wireless transmission.

24. (Currently Amended) The expendable unit according to claim 21, wherein the ~~data~~ second memory area of said memory stores information concerning an amount of expendable recording agent in the expendable unit,

wherein, when the amount of the expendable recording agent in the expendable unit is less than a predetermined amount or one of a plurality of predetermined amounts, writing to the ~~data~~ second memory area of said memory is set to be inhibited.

25. (Currently Amended) The expendable unit according to claim 21, wherein said memory second memory area has address areas corresponding to a plurality of predetermined amounts of expendable recording agent, when the amount of expendable recording agent in the expendable unit reaches a predetermined amount, data indicating that the amount of expendable recording agent reaches the predetermined amount is written to the data second memory area corresponding to the predetermined amount, and writing to the written data area is set to be inhibited.

26. (Canceled)

27. (Previously Presented) The apparatus according to claim 1, wherein said agent is toner and said expendable unit is a toner cartridge.

28. (Previously Presented) The apparatus according to claim 1, wherein the apparatus is an electrophotographic-type image forming apparatus.

29. (Previously Presented) The apparatus according to claim 7, wherein said agent is toner and said expendable unit is a toner cartridge.

30. (Previously Presented) The apparatus according to claim 7, wherein the apparatus is an electrophotographic-type image forming apparatus.

31-34. (Canceled)

35. (Currently Amended) The expendable unit according to claim 21, wherein said agent is toner and said expendable unit is a toner cartridge.

36. (Currently Amended) The expendable unit according to claim 21, wherein the apparatus is an electrophotographic-type image forming apparatus.

37. (Currently Amended) A memory unit provided to an expendable unit which can be detachably attached to a printing apparatus, said memory unit comprising:

a first memory area to store ~~and hold information~~ data that concerns an initial use state of the expendable unit; and

a second memory area to store data that concerns a use state of a recording agent of the expendable unit;

a third memory area to store data for determining inhibition/permission of writing with respect to said first memory area and the second memory area.

38. (Canceled)

39. (Currently Amended) The memory unit according to claim 37, wherein said second third memory area is a specific address area or a specific bit area of the memory unit.

40. (Canceled)

41. (Currently Amended) The memory unit according to claim 37, wherein said expendable unit has an expendable agent used in a print process, and the information data concerning the expendable unit is information related to a remaining amount of the expendable agent.

42. (Currently Amended) The memory unit according to claim 37, wherein the information data concerning the expendable unit is information concerning whether or not the expendable unit is new.

43. (Currently Amended) The memory unit according to claim 37, wherein the information data concerning the expendable unit is date information concerning when the expendable unit has been attached to the printing apparatus for the first time.

44. (New) The apparatus according to claim 1, wherein data concerning the expendable unit is information whether or not the expendable unit is new.

45. (New) The apparatus according to claim 7, wherein data concerning the expendable unit is information whether or not the expendable unit is new.

46. (New) The expendable unit according to claim 21, wherein data concerning the expendable unit is information whether or not the expendable unit is new.